

# E-Products for Training and Supporting Skilled Support Personnel

Robert Gray, Senior Software Engineer  
CogniTech Corporation  
1060 East 100 South, Suite 306  
Salt Lake City, Utah 84102  
Phone: (801) 322-0101  
E-mail: [rgray@cognitech-ut.com](mailto:rgray@cognitech-ut.com)



# About CogniTech

- Small business with 9 employees
- Founded in 1996
- Expertise in software development for healthcare, training, physical science, and engineering
- Cutting-edge applied research, technologies and services
- Teams with corporations, universities, research labs



# CogniTech Experience

- Domain Expertise
  - Occupational and environmental health
  - Training systems
  - Modeling and Simulation of chemicals, materials, and sensors
  - Emergency medical and other healthcare information systems
- Software Expertise
  - Java, C/C++, Web technologies, Fortran,
  - Advanced Distributed Learning
  - Database
  - XML
  - UML & Object Oriented Design
  - CORBA, Web Services, HLA
- Data Analysis
- Platforms
  - Unix/Linux, Windows, Interactive Voice Response, Personal Data Assistant (PDA), Embedded devices, High Performance Computing



# Project Goal

Provide technologies to:

- Help Prepare, Train, and Support Skilled Support Personnel (SSP) for response to large scale disasters such as the World Trade Center,
- Provide awareness level training,
- Allow short incident-specific content to be provided prior to a response action,
- Support SSP where English is a second language or literacy rates may be lower, and
- Provide an environment where content can be quickly developed and published.

# Learning Content Management System

- Central repository for content storage
  - Questionnaires with complex control flows
  - Training material
  - Material Safety Data Sheets
  - Technical Manuals
- Visual Content Authoring Environment
- Reuse of content
- Searchable
  - Meta-Tagged
- Non-proprietary format of data storage
- Easy and Inexpensive to maintain
- Standards compliant



# Publishing Environments

- Computer Based Training
- Web Based Training
- Supplemental Classroom Material
- Pre-Testing / Questionnaire
- Cross-Training / Awareness Level Training
- Interactive Voice Response (IVR) Telephony
- Pocket PC, Palm OS
- Wireless Mobile Devices



# Product Evaluation

## ● Content Development

- Personal Protective Equipment HAZWOPER Training Developed with the University of Utah
- Author content using CogniTech's tools

## ● Content Publishing

- SCORM compliant Web Based Training
- Computer Based Training
- Supplemental Classroom material
- Voice Server – Interactive Voice Response
- Wireless Devices



# Conclusion

- Easy to use Authoring Environment
- Content Scalability and Reuse
- Just-in-Time Content Delivery
- Multi-Platform Support
- Future Proof Environment



# Acknowledgements

● This project funded by NIH Grant Number R43 ES013080-01

● Collaborators

- Professor Dean Lillquist
- Steffanie Moore
- Dr. Donni Toth
- Dr. Jerome Soller

